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IN THE CLAIMS

Please amend claims 1, 4, 5, 7 and 11, and cancel claims 9, 20, 22 and 23 as follows:

1. (CURRENTLY AMENDED) A method of making a diploid transgenic oviparous teleost fish comprising:

(a) introducing an exogenous nucleic acid sequence into the genome of a cultured embryonic fibroblast cell derived from a progenitor Danio rerio embryo ~~teleost fish~~;

(b) transplanting the nucleus of the cell of step (a) into an enucleated egg derived from a parental fish, wherein the parental fish is of the same species as the progenitor if fertile progeny are desired ~~of the same genus as the progenitor fish, wherein fish embryos in the genus develop externally~~; and

(c) ~~culturing placing the resultant embryo in egg generated by step (b)~~ into conditions suitable for embryonic fish development so that a diploid transgenic oviparous teleost fish is made.

2. (ORIGINAL) The method of claim 1, wherein the transgenic fish has at least one exogenous gene product expressed therein that is encoded by the exogenous nucleic acid sequence.

3. (CANCELLED).

4. (ORIGINAL) The method of claim 1, wherein the exogenous nucleic acid sequence comprises a promoter element or an enhancer element.

5. (CURRENTLY AMENDED) The method of claim 1, wherein ~~the parental fish is of the same species as the progenitor fish, resulting in the~~ resulting transgenic fish ~~being~~ is fertile.

6. (CANCELLED).

7. (CURRENTLY AMENDED) The method of claim 1, wherein the cultured embryonic fibroblast cell derived from the Danio rerio embryo ~~progenitor teleost fish~~ has been

maintained in cell culture for an amount of time sufficient for at least 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170 or 180 cell divisions prior to transplanting the nucleus of the embryonic fibroblast into an enucleated egg.

8. (ORIGINAL) The method of claim 1, wherein the cultured cell derived from the progenitor fish has been frozen prior to step (a) or step (b).

9. (CANCELLED).

10. (CANCELLED).

11. (CURRENTLY AMENDED) A method of making a progeny oviparous teleost fish comprising:

- (a) obtaining an embryonic fibroblast cell from a progenitor Danio rerio embryo fish,
- (b) maintaining the cell in in vitro culture,
- (c) transplanting the nucleus of the cell of step (b) into an enucleated egg from a parental fish of the same species genus as the progenitor fish, ~~wherein fish embryos in the genus develop externally; and~~
- (d) ~~culturing~~ placing the resultant embryo in egg generated by step (b) into conditions suitable for embryonic fish development such that the progeny oviparous teleost fish so that the progeny fish is made.

12. (ORIGINAL) The method of claim 11, wherein the progeny fish is diploid.

13. (ORIGINAL) The method of claim 11, wherein the progeny fish is a transgenic fish.

14. (PREVIOUSLY PRESENTED) The method of claim 13, wherein the transgenic fish expresses at least one exogenous gene product encoded by a transgene.

15. (ORIGINAL) The method of claim 13, wherein the transgenic fish has at least one endogenous gene product that is inactivated by the transgene.

16. (ORIGINAL) The method of claim 13, wherein the transgenic fish comprises an exogenously introduced promoter element or enhancer element.

17. (ORIGINAL) The method of claim 11, wherein the cell is maintained in in vitro culture an amount of time sufficient to:

- (i) introduce an exogenous nucleic acid sequence into the genome of the cell; and
- (ii) identify the cell containing the an exogenous nucleic acid sequence within a plurality of cells comprising the cell having the exogenous nucleic acid sequence and a cell lacking the exogenous nucleic acid sequence.

18. (ORIGINAL) The method of claim 11, wherein the cell is maintained in culture an amount of time sufficient for at least 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170 or 180 cell divisions.

19.-23. (CANCELLED).